

REMARKS

Claims 28-46 are pending in the application. Claims 1-27 have been canceled. Of the claims, Claims 28 and 36 are independent claims. Claims 28-46 are rejected under 35 U.S.C. § 102(e) as being deemed anticipated by Benayoun et al. (U.S. Patent No. 6,704,866). Claims 34 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benayoun et al. (U.S. Patent No. 6,704,866). The application as argued herein, is believed to overcome the rejection.

Regarding objection to the Title

The title has been objected to as not being descriptive. The Applicants' have amended the title. The title as now amended is now clearly indicative of the invention to which the claims are directed.

Regarding Rejections under 35 U.S.C. 102(e)

Claims 28-46 are rejected under 35 U.S.C. § 102(e) as being deemed anticipated by Benayoun et al. (U.S. Patent No. 6,704,866).

The Applicants' disclosed invention is directed to a data encryption system having a plurality of processors. A packet is received at an ingress port (Fig. 8, 81) of the data encryption system is processed by the processors using the processes shown in Figs. 9a-9d and the processed packet exits the data encryption system through the egress port (Fig. 8, 86). A control process modifies the received packet to include control data that identifies processes to be performed on the packet by the plurality of processors in the system. An interconnection responds to control data in the packet to forward the packet with control data from processor to processor. After processing is complete, the processed packet is forwarded without the control data from an output.

The cited reference Benayoun is directed to a process for transporting data from a transmitting terminal to a receiving terminal through a plurality of nodes. Referring to Fig. 1, the packet is forwarded from DTE1 through access nodes 1, 6; network nodes 3, 4; and protocol nodes 2, 5 to DTE2. The control protocol defines the function of each node (access, protocol,

network) between the transmitting DTE and the receiving DTE. For example, a network node may only switch or route, it has no access to the protocol header or the data. Only the access node (node 1) performs encryption. (See Col. 9, lines 5-61.)

Benyoun does not teach or suggest the Applicants' claimed "control process which modifies a received packet to include control data which identifies processes to be performed on the packet." In contrast, Benyoun merely discusses a control protocol that defines the function of each node (access, protocol, network) between transmitting and receiving DTEs. For example, a network node may only switch or route, it has no access to the protocol header or the data in the packet. The use of a control protocol to identify the function of a node does not teach or suggest the Applicants' control process.

Benayoun does not teach or suggest at least the Applicants' claimed "a plurality of processors which perform the processes identified by the control data, including an encryption process". (See Claim 28.) Benayoun is directed to a plurality of nodes in a network, all encryption occurs in a single node (access node 1) prior to forwarding the packet through other nodes and all decryption occurs in a single node (access node 6).

Benyoun does not teach or suggest the Applicants' claimed "an interconnection which responds to control data in the packet to forward the packet with control data from processor to processor". In contrast, in the network described by Benyoun the packet is forwarded from node to node, not from processor to processor in a data encryption system.

Benyoun does not teach or suggest the Applicants' claimed "an output from which the processed packet is forwarded without the control data". In contrast, in the system for transporting data from a transmitting terminal to a receiving terminal through a plurality of nodes, a "processed" packet is not forwarded to the receiving terminal. In contrast, node 6 (Fig. 6) unencrypts and transforms the data into clear data for forwarding to the receiving terminal (DTE2).

Claims 29-36 are dependent on Claim 28 and thus include this limitation over the prior art. Independent Claim 37 and claims dependent on claim 37, include like limitations distinguishing the cited art.

As such the § 102 rejection of Claims 28-33, 35-43 and 45-46 is believed to be overcome.

Regarding Rejections to the claims under 35 U.S.C. 103(a)

Claims 34 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benayoun et al. (U.S. Patent No. 6,704,866). Claim 34 is dependent on Claim 28 and Claim 44 is dependent on Claim 37 and thus include the limitations previously discussed over the prior art.

Furthermore, Benayoun does not even discuss IP protocol processing. Benayoun merely discusses adding a new protocol layer (DML) between the ATM protocol and the IP protocol in a data frame (the DML layer) which defines the function of each node between a transmitting DTE and a receiving DTE. The discussion of the addition of a new protocol layer to a data frame that is forwarded from node to node in a network does not teach or suggest the Applicants' disclosed IPSEC processing which includes IP Header Manipulation, DES Encryption and HMAC96-MD5 Authentication. (See Fig. 5, processes (3) (4) and (5) and Page 12, line 14 – Page 13, line 25.)

As such the § 103 rejection of Claims 34 and 44 is believed to be overcome.

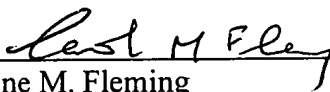
Accordingly, the present invention as now claimed is not believed to be anticipated by or made obvious from the cited art or any of the prior art. Removal of the rejections of claims 28-46 under 35 U.S.C. 102(e) and Claims 34 and 44 under 35 U.S.C. 103(a) and acceptance of Claims 28-46 is respectfully requested.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By 
Caroline M. Fleming
Registration No. 45,566
Telephone: (978) 341-0036
Facsimile: (978) 341-0136

Concord, MA 01742-9133

Dated: 8/16/04